

WHAT IS CLAIMED IS:

1. A heating assembly, comprising:

a pan;

5 an insulating frame, wherein the pan is
attached to the insulating frame;

a substrate having a major surface and a
conductive coating disposed thereon, wherein the
substrate is attached to the insulating frame;

10 and

at least two bus bars, the bus bars being
disposed onto and in electrical contact with the
coating.

15 2. The heating assembly of claim 1, wherein the
insulating frame comprises a ring.

3. The heating assembly of claim 2, wherein the
pan comprises metal.

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4. The heating assembly of claim 3, wherein the
pan is attached to a cooktop.

5. The heating assembly of claim 1, wherein the insulating frame comprises a high temperature dielectric material.

5 6. A warming device comprising the heating assembly of claim 1, wherein the substrate is comprised of borosilicate glass or tempered soda-lime silica glass.

10 7. A warming drawer comprising the warming device of claim 6.

8. A bread warmer comprising the warming device of claim 6.

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9. A heating device comprising the heating assembly of claim 1, wherein the substrate is comprised of a ceramic or glass-ceramic composite.

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10. A cooktop comprising the heating device of claim 9.

11. The cooktop of claim 10, wherein the pan is attached to the cooktop and the cooktop is spaced

apart from the substrate by a dimension in the range
of 8 to 12 mm.

5 12. A countertop burner comprising the heating
device of claim 9.

10 13. The heating assembly of claim 1, further
comprising at least one temperature sensor in thermal
contact with the substrate or cooking surface.

15 14. The heating assembly of claim 13, further
comprising an appliance control system that
communicates with the temperature sensor to regulate
the electrical current that is conducted through the
coating, thus controlling the heating of the heating
assembly.

20 15. The heating assembly of claim 1, wherein the
conductive coating comprises a conductive metal
oxide.

16. The heating assembly of claim 1, wherein the
bus bars comprise copper disposed by way of a heating
head and mask apparatus.

17. A cooking appliance, comprising:

a cooktop;

5 a metal pan, wherein the metal pan is attached
to the cooktop;

an insulating ring, wherein the insulating
frame is attached to the pan;

10 a substrate having a major surface and a
conductive coating disposed thereon, wherein the
substrate is attached to the insulating ring; and

at least two bus bars, the bus bars being
disposed onto and in electrical contact with the
coating.

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